ALBERTA NON-GRID RISK SHARING POOL

JULY 2020 OPERATIONAL REPORT

ACTUARIAL HIGHLIGHTS

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FACILITY Association

ACTUARIAL HIGHLIGHTS

RSP ALBERTA NON-GRID

OPERATIONAL REPORT

JULY 2020

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1 Summary

Key Points

(a) The loss ratios currently being used include an initial assessment of the incurred impacts associated with the COVID-19 pandemic, with a further review and assessment to be included with the RSP 2020 Q2 actuarial valuation update (as at June 2020); and

(b) The month's Current Accident Year recorded and paid activity were both higher than projected; the activity was reviewed, and attributed to the high level of Comprehensive claims activity reported in the month in relation to the June 13, 2020 hailstorm in and around the Calgary area.

1.1 Valuation Schedule (Fiscal Year 2020)

The July 2020 Operational Report leverages actuarial assumptions consistent with last month (that is, it does not reflect the results of an updated valuation). The following table summarizes the valuation implementations scheduled for fiscal year 2020.

ALBERTA NON-GRID RISK SHARING POOL
FISCAL YEAR 2020 – SCHEDULE OF VALUATIONS

Valuation Date	Discount Rate (per annum)	Operational Report	Description of Changes
Sep 30, 2019 (completed)	1.46% mfad 25 bp	Oct. 2019	updated valuation (roll forward) : accident year 2019 loss ratio decreased 2.6 points to 102.2%; discount rate increased 3 basis points; no change to selected margins for adverse deviations
Dec. 31, 2019 (completed)	1.64% mfad 25 bp	Mar. 2020	update valuation: 2019 loss ratio decreased 1.3 points to 100.9%; accident year 2020 loss ratio decreased 7.0 points to 99.7%; discount rate increased 18 basis points; no change to selected margins for adverse deviations
Mar. 31, 2020 (completed)	0.63% mfad 25 bp	May. 2020	update valuation (partial roll-forward): accident year 2020 loss ratio decreased 3.6 points to 96.1%; discount rate decreased 101 basis points; no change to selected margins for adverse deviations
Jun. 30, 2020	% mfad -- bp	Aug. 2020	update valuation
Sep 30, 2020	% mfad -- bp	Oct. 2020	update valuation (roll-forward)

Under the proposed schedule for fiscal year 2020, the off-half valuation quarters ending March 31, 2020 and September 30, 2020 would not reflect a full valuation update of assumptions, but would rather roll-forward key assumptions from the previous valuation. However, with disruption in the insurance environment from the COVID-19 pandemic, the valuation quarter ending March 31, 2020 includes a partial update of key assumptions to reflect this impact. Other assumptions are rolled-

forward from the previous valuation.

1.2 Appointed Actuary and Hybrid Actuarial Services Model

Mr. Cosimo Pantaleo of Ernst & Young LLP (EY) was appointed as Actuary by the FA Board at its February 18, 2020 meeting.

Facility Association operates under a hybrid model in relation to the management and provision of actuarial services. Under this model, actuarial services are performed by both Facility Association's internal staff and its external actuarial consulting firm. The hybrid model approach maximizes the efficiency of resource allocation while providing access to additional expertise and capacity as needed.

1.3 Consideration of Recent Legal Decisions and Changes in Legislation / Regulation[1]

There have been no changes in these descriptions since last month's Highlights.

Consideration and assessment of potential impacts of legal decisions and changes in legislation / regulation constitutes a regular part of the valuation process. Descriptions of some of the more recent (i.e. within the last five years) changes are provided below.

In the **Alberta Treasury Board and Finance Notice 04-2018** (Clarification of Minor Injury Regulation), dated **May 17, 2018**, the Alberta Superintendent of Insurance advised that clarifying amendments have been made to the definition of minor injuries under the Minor Injury Regulation (MIR). With the **most recent** valuation March 31, 2020), reform adjustments related to changes in the definition of minor injuries under the MIR, were included with the updated industry trend analysis (completed using industry data as at June 30, 2019), impacting the selection of ultimates.

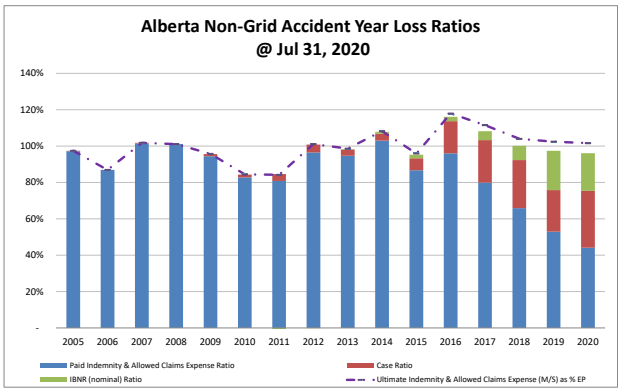
1.4 Current Provision Summary

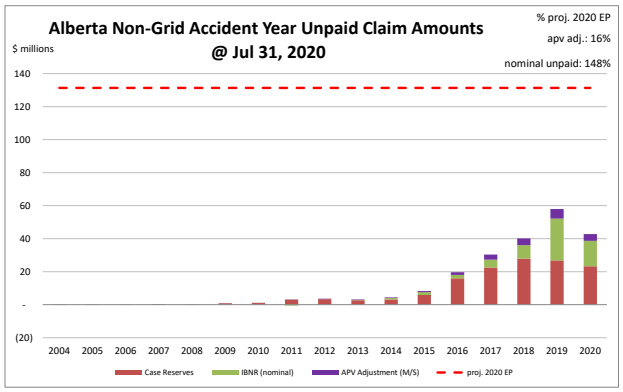
The following charts show the current levels of claim liabilities[2] booked by accident year[3]. The left chart displays life-to-date payments, case reserves, IBNR, and the total including actuarial present value adjustments against accident year earned premium. The right chart shows the associated dollar amounts for the components of the claim liabilities and the current projected amount of 2020 full year earned premium (the red hash-mark line) to provide some perspective.

[1]This url to a pdf is to a helpful guide on how bills become laws: https://www.ola.org/sites/default/files/common/how-bills-become-law-en.pdf.

[2]Claim liabilities refer to provision for unpaid indemnity and allowed claims expenses. Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this discussion.

[3]Accident year 2004 was an incomplete year and therefore has been excluded from the loss ratio chart.





"M/S" refers to "Member Statement" values – that is, actuarial present value adjustments at the selected discount rate.

The current actuarial present value adjustments balance ($20.7 million – see the following table) represents 16% of the earned premium projected for the full year 2020 (see the upper right corner of the preceding chart on the right). If our current estimates of the nominal unpaid amounts prove to match actual claims payments, the actuarial present value adjustments will be released into the net operating result over future periods.

claim liabilities ($000s)

	amt	%
case	136,947	63.5%
ibnr	57,999	26.9%
M/S apv adjust.	20,657	9.6%
M/S total	215,603	100.0%

The table to the left breaks down the Member Statement (M/S) claim liabilities total into component parts, showing that the majority of the claim liabilities for this RSP is in case reserves. Approximately 70% of the IBNR balance relates to accident years 2019 and 2020 (see Exhibit B). Approximately 89% of the M/S total claim liabilities are related to accident years 2016-2020 inclusive (i.e. the most recent 5 accident years), and approximately 1% is related to accident years 2010 and prior (i.e. prior to the most recent 10 accident years).

The following tables summarize the premium liabilities and the total policy liabilities.

premium liabilities ($000s)

	amt	%
unearned prem	64,756	94.3%
prem def/(dpac)	(1,361)	(2.0%)
M/S apv adjust.	5,284	7.7%
M/S total	68,679	100.0%

policy liabilities ($000s)

	amt	%
claim	194,946	68.6%
premium	63,395	22.3%
M/S apv adjust.	25,941	9.1%
M/S total	284,282	100.0%

2 Activity During the Month of June 2020

2.1 Recorded Premium and Claims Activity

The following table summarizes the extent to which premiums and claims amounts recorded during the month differ from projections reflected in the prior month's Operational Report[4].

[4]There may be rounding differences in values in this document compared with the associated Bulletin and/or Operational Report.

Alberta Non-Grid RSP Actual vs Projected Summary: Recorded Transaction Amounts ($ thousands)

Table 01	Earned Premium		Paid Indemnity & Allowed Claims Expense		Case increase / (decrease)		Recorded increase / (decrease)	
Accident Year	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected
Prior	(1)	(1)	781	(1,222)	(322)	1,147	459	(75)
2018	(72)	(72)	910	20	(552)	148	358	168
2019	(103)	(103)	788	(167)	(616)	83	172	(84)
2020	10,579	(463)	13,359	2,156	115	3,990	13,474	6,146
TOTAL	10,403	(639)	15,838	787	(1,375)	5,368	14,463	6,155

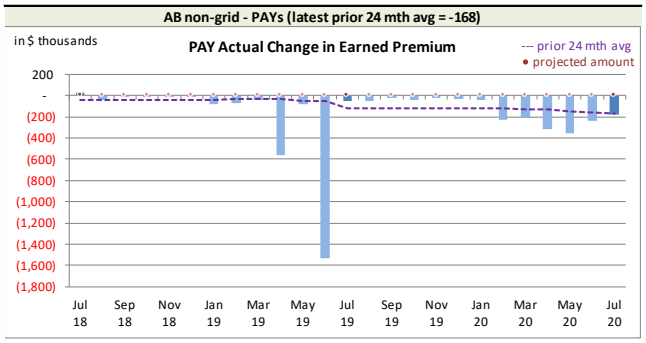
(Recorded transaction amounts exclude IBNR & other actuarial provisions)

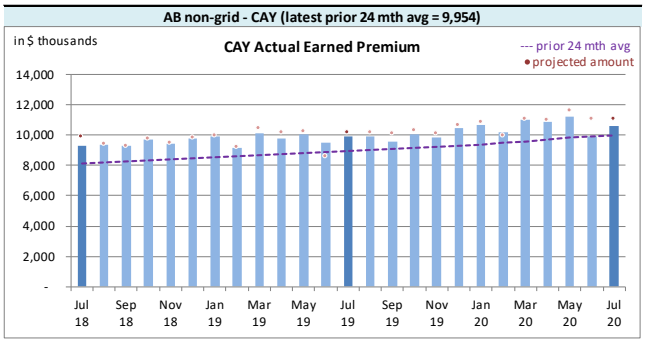
Claims transaction activity is generally volatile and changes from one month to the next are anticipated due to this natural "process variance" (i.e. random variation). Each month, the projection variances are reviewed for signs of projection bias and to identify potential ways to reduce the level of the variance. Commentary from our review is provided in the sub-sections that follow.

2.1.a Actual vs. Projected (AvsP): Earned Premium

The following charts show actual **earned premium**[5] activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

*Alberta non-Grid RSP Actual **Earned Premium** by Calendar Month*





Earned premium changes during a given calendar month in relation to prior accident years tend to be at modest levels, although relatively high levels generally occur at the beginning of each year.

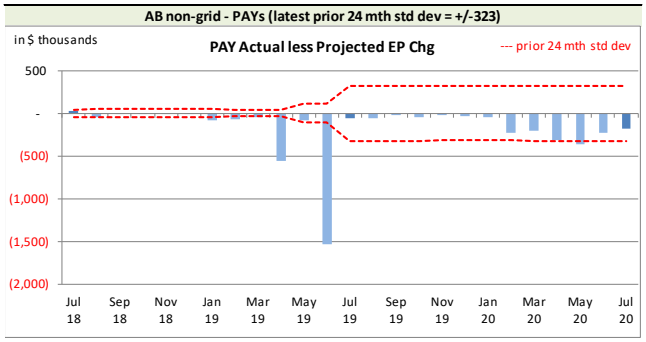
On Latest $ thousands		
Earned Premium	PAYs	CAY
Mthly Avg EP Chg (prior 24 mths)	(168)	9,954
std dev	323	557
A-P <> std dev	6	3
% <> std dev	24.0%	12.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	better

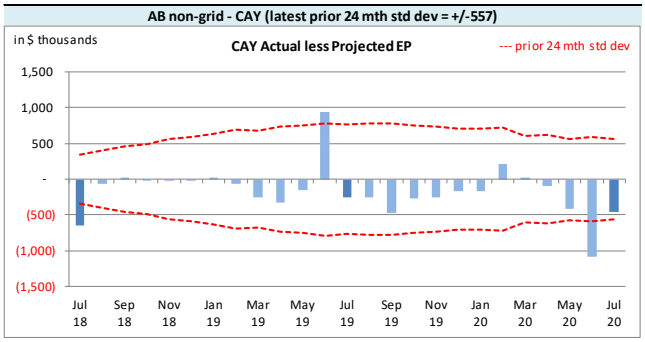
The associated variance between the actual changes and the projections from the previous month are shown in the following charts. **Earned premium** change projections are all attributed to the current accident year as the projection upload does not accept **earned premium** changes for other accident years. We do not see this limitation as being significant for our purposes, but it does mean that the actual less projection variance will equal the actual **earned premium** change in relation to prior

[5]Premium is earned on a daily basis based on the transaction term measured in days. As a result, months with 31 days earned relatively more than those with 30 days, and February earns the least.

accident years.

*Alberta non-Grid RSP Actual vs. Projected Summary: **Earned Premium** Variances by Calendar Month*



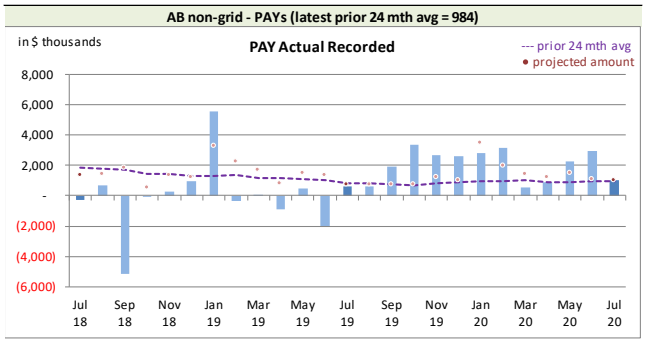


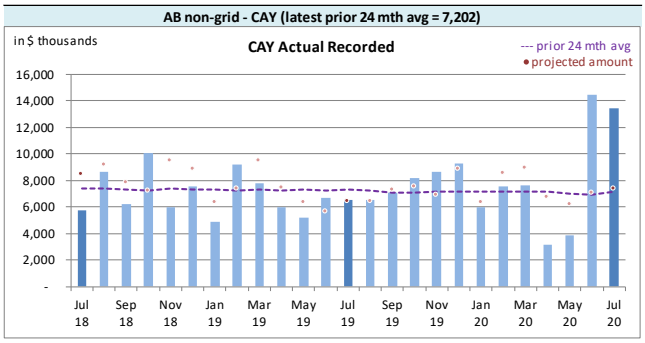
We project **earned premium** changes from known unearned premium and projected written premium levels, but upload the total projections as current accident year (CAY). This process has generated prior accident years' (PAYs) bias[6], with actuals generally lower than projected, although the magnitude is not high relative to monthly premium. In addition to the PAYs' bias, the CAY has also shown bias[7], with actuals being generally lower than projected, and while we modified our projections processes in response, bias still exists. Over time, we may consider other projection approaches to address the bias issue, but it is not currently deemed as priority.

2.1.b AvsP: Recorded Indemnity & Allowed Claims Expense

The following charts show actual **recorded** activity (**paid** and case reserve changes), in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

*Alberta non-Grid RSP Actual **Recorded** by Calendar Month*



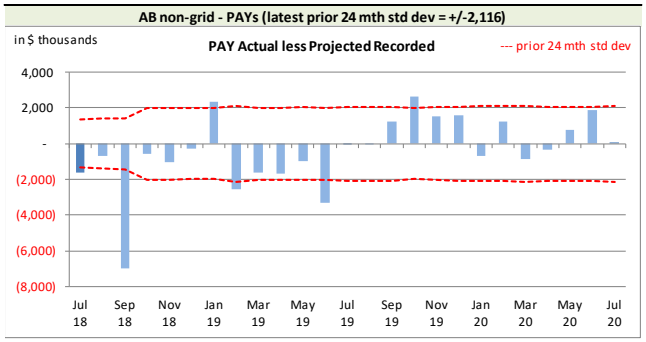


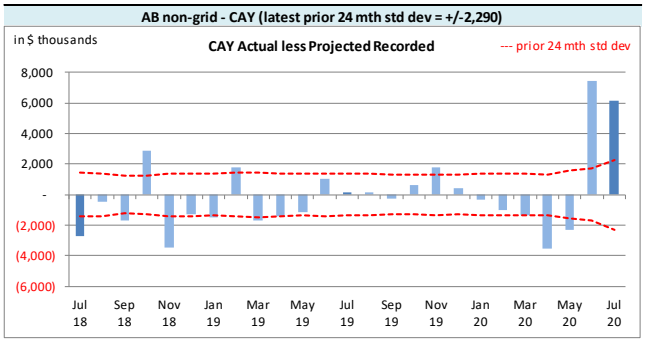
Recorded activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

[6]The PAYs' variances will show bias as the projection upload forces all earned premium projections to be attributed to the CAY.

[7]We measure bias based on a 95% confidence range for a binominal distribution with trials based on the range being considered (25 in this case) and 50% probability of success. The rolling 25-month CAY variances at July 2020 had only 5 months where the actuals was higher than projected, and as the 95% confidence range is 8 to 17, bias continues to be indicated.

Alberta non-Grid RSP Actual vs Projected Summary: ***Recorded*** *Variances by Calendar Month*





On Latest $ thousands		
Recorded	PAYs	CAY
Mthly Avg Recorded (prior 24 mths)	984	7,202
std dev	2,116	2,290
A-P <> std dev	6	14
% <> std dev	24.0%	56.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	worse

With respect to **recorded** indemnity & allowed claims expense activity, 24% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **recorded** amounts (see table on left), suggesting the projection process has performed better than simply projecting the prior 24-month average amount (assuming it follows a normal distribution). Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (9 of 25 variances are positive).

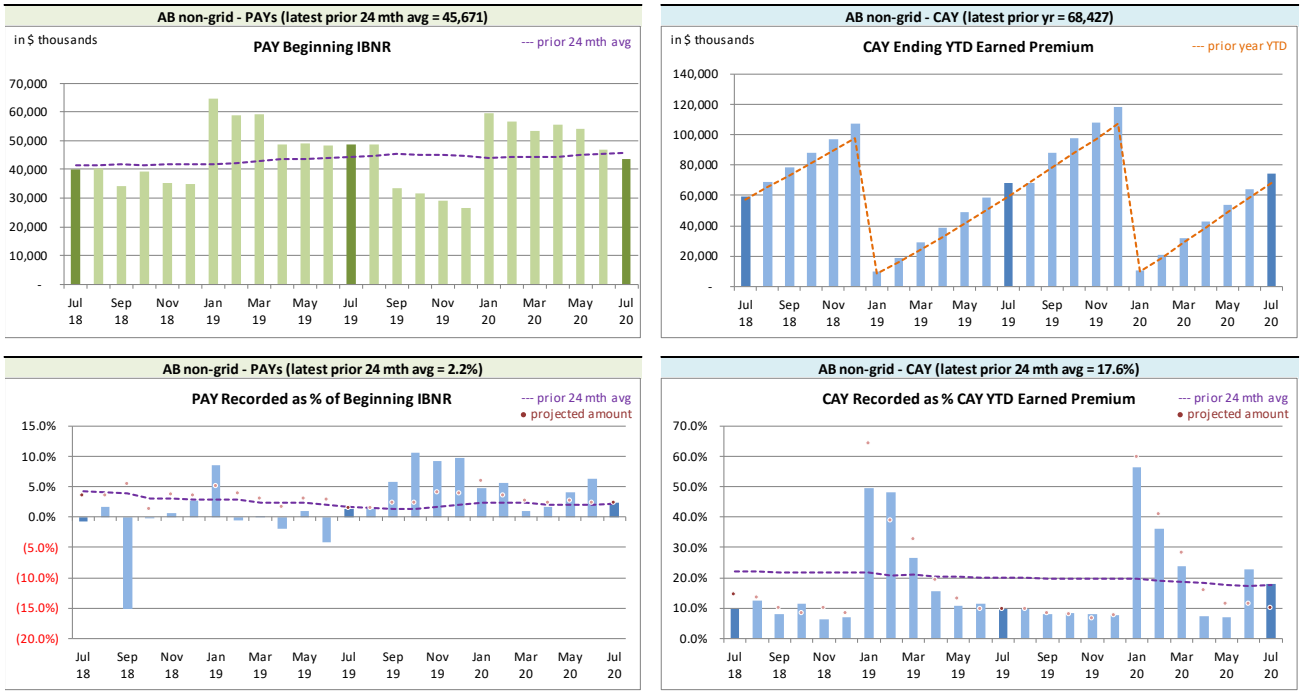
The current accident year (CAY) **recorded** variances fell outside of one standard deviation 56% of the time over the last 25 calendar months (see the preceding table on the left), suggesting that the projection process has performed worse than simply projecting the prior 24-month average amount. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (10 of 25 variances are positive).

The CAY **recorded** variance was outside of the one standard deviation band this month (see preceding chart on the right). The significantly higher than projected recorded activity was reviewed, and the high level of Comprehensive recorded claims activity reported in the month was attributed to delayed claims reporting in relation to the June 13, 2020 hailstorm in and around the Calgary area.

The method for establishing IBNR adjusts automatically for changes in **earned premium** and **recorded** claims activity level (see sections 2.2 and 3).

We have included, for reference, the following charts related to levels influencing **recorded** activity.

Alberta non-Grid RSP Levels that influence[8] ***Recorded*** *activity by Calendar Month*



We track PAY beginning IBNR as **recorded** activity comes out of IBNR. Changes in the PAY beginning IBNR (see upper left of the preceding group of charts) occur for several possible reasons:

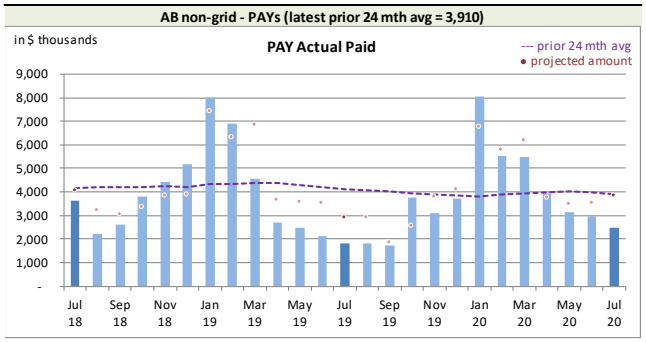
- to offset actual **recorded** activity (through loss ratio matching);
- the annual switchover as a CAY becomes a PAY(occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning IBNR change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

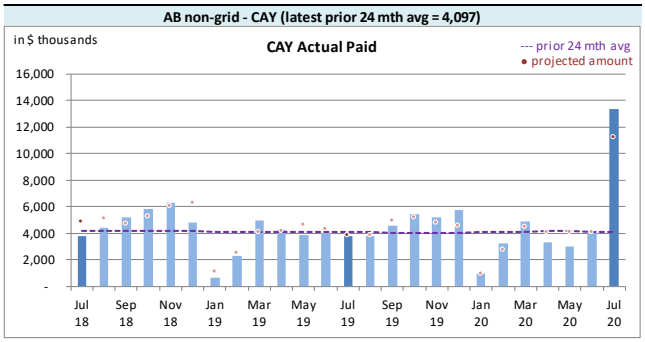
2.1.c AvsP: Paid Indemnity & Allowed Claims Expense

The following charts show actual **paid** activity in each of the most recent 25 calendar months, along with a "prior 24-month average" to show how each month's actual compares with the average amount of the preceding 24 calendar months.

[8]Our recorded activity projections for the prior accident years are based on selected ratios of recorded activity to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date IBNR to year-to-date selected ultimate (i.e. selected LR x earned premium), deriving year-to-date recorded as selected ultimate less IBNR. In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

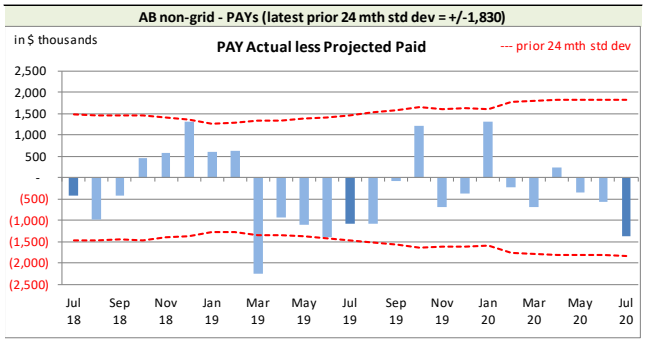
*Alberta non-Grid RSP Actual **Paid** activity by Calendar Month*

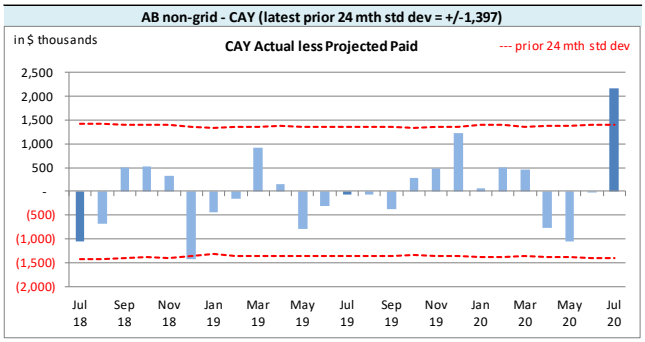




Paid activity variances from the previous month's projections are shown in the following charts, including the "prior 24-month standard deviation" levels to show how the variances from projection compare with historical standard deviations.

*Alberta non-Grid RSP Actual vs Projected Summary: **Paid** Variances by Calendar Month*





On Latest $ thousands		
Paid	PAYs	CAY
Mthly Avg Paid (prior 24 mths)	3,910	4,097
std dev	1,830	1,397
A-P <> std dev	1	2
% <> std dev	4.0%	8.0%
norm <> std dev	31.7%	31.7%
performance vs 24-mth avg:	better	better

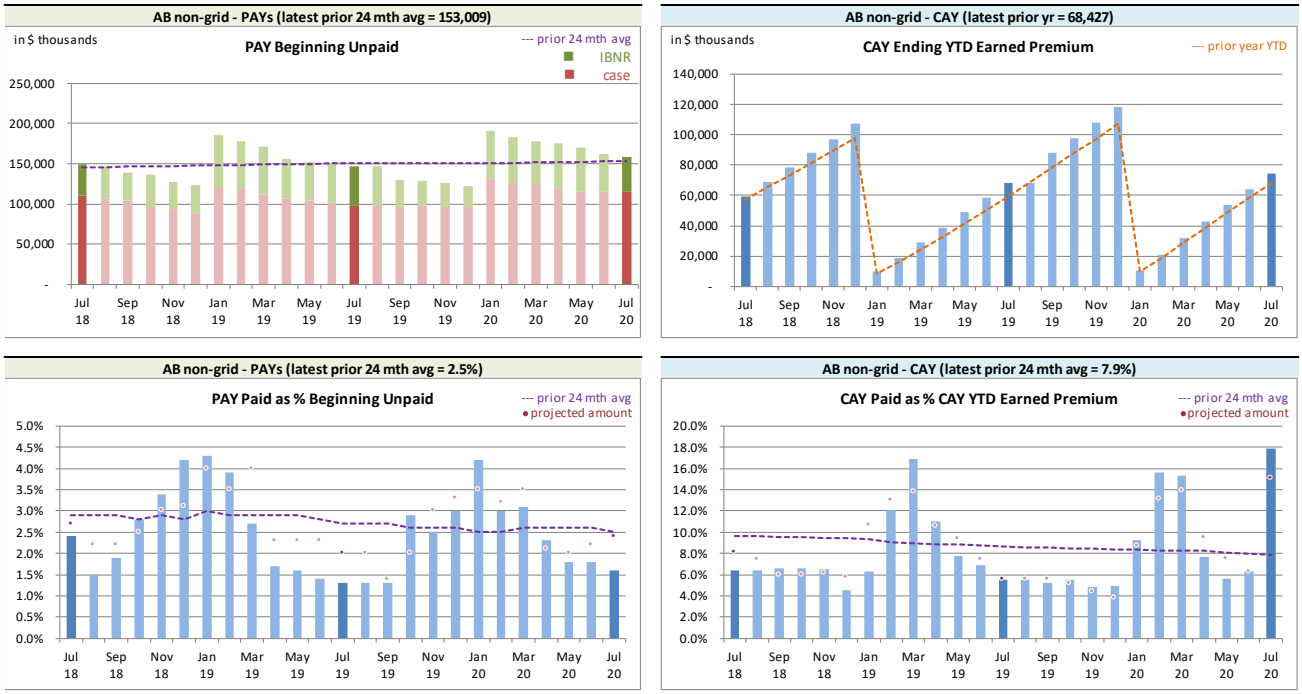
With respect to **paid** indemnity & allowed claims expense, 4% of the prior accident years' (PAYs) variances over the last 25 calendar months have fallen outside of one standard deviation of the actual **paid** amounts (see table on left), suggesting the projection process has performed better than simply projecting the prior 24-month average amount (assuming it follows a normal distribution). Bias has not been indicated at a 95% confidence level on a lagging 24-month basis (8 of 25 variances are positive).

The current accident year (CAY) **paid** variances fell outside of one standard deviation 8% of the time over the last 25 calendar months (see the preceding table), suggesting the projection process has performed better than simply projecting the prior 24-month average amount. Bias has not been indicated at a 95% confidence level on a rolling 25-month basis (12 of 25 variances are positive).

The CAY **paid** variance was outside of the one standard deviation band this month (see preceding chart on the right) the higher than projected paid activity was reviewed, and attributed to the high level of Comprehensive paid claims activity in the month in relation to the June 13, 2020 hailstorm in and around the Calgary area.

We have included, for reference, the following charts related to levels influencing **paid** activity.

Alberta non-Grid RSP Levels that influence[9] ***Paid*** *activity by Calendar Month*



We track the PAY beginning unpaid balance (case and IBNR) as **paid** activity comes out of the unpaid balance. Changes in the PAY beginning unpaid balance (see upper left of the preceding group of charts) occur for several possible reasons:

- to offset actual **paid** activity (may reduce case or IBNR or both);
- the annual switchover as a CAY becomes a PAY (occurs in January); and
- when a new valuation is implemented, where the valuation resulted in changes to the selection of PAYs' ultimates (will show up as a beginning unpaid balance change one month after the valuation is implemented, i.e. the change will generally show in April, June, September, and November).

2.2 Actuarial Provisions

An ultimate loss ratio matching method (described in section 3) is used to determine the month's IBNR[10], and factors are applied to the nominal unpaid claims liability (case plus IBNR) to determine the discount amount (shown as a negative value to indicate its impact of reducing the liability) and the Provisions for Adverse Deviations. The loss ratios and the factors used to determine the projections and actuals were based on the applicable valuation.

The following table summarizes variances in provisions included in this month's Operational Report

[9]Our paid projections for the prior accident years are based on selected ratios of paid to beginning unpaid balances, whereas the current accident year projections are based on selected ratios of year-to-date paid to year-to-date selected ultimate indemnity (i.e. selected LR x earned premium). In both cases, the ratio selection is based on our review of the more recent recorded activity and recent AvsP analyses.

[10]For ease of discussion, "IBNR" is used in place of "provisions for incurred but not recorded (IBNR) and development".

and the associated one-month projections from last month's Report.

Alberta Non-Grid RSP Actual vs Projected Summary: IBNR and APV Amounts ($ thousands)

Table 02

	IBNR		actuarial present value adjustments: Discount Amount		actuarial present value adjustments: Provisions for Adverse Deviations		IBNR + actuarial present value adjustments	
Accident Year	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected
Prior	9,025	75	(1,112)	(19)	7,788	137	15,701	193
2018	8,215	(240)	(578)	1	4,658	(12)	12,295	(251)
2019	25,325	(17)	(887)	(1)	6,723	9	31,161	(9)
2020	15,434	(6,591)	(658)	44	4,723	(318)	19,499	(6,865)
TOTAL	57,999	(6,773)	(3,235)	25	23,892	(184)	78,656	(6,932)

The IBNR provision is $6.8 million lower than projected from last month, counterbalancing the recorded claims activity and adjusting for the earned premium variance impacts indicated in section 2.1.

Exhibit G shows the accident year IBNR amount change from last month to this month broken down into:

(i) the change projected last month;

(ii) the additional change due to variances in earned premium (because we apply a loss ratio to earned premium in determining ultimate level) and/or recorded claims (as IBNR is calculated as ultimate less recorded) differences; and

(iii) the additional change due to valuation implementation impacts (as applicable)

The variances associated with (ii) above are discussed in sections 2.1.a and 2.1.b.

The following table summarizes the variances in the provisions for premium deficiency liability / (deferred policy acquisition cost asset) included in this month's Operational Report and the one-month projections from last month's Report. This RSP is in a premium deficiency position (shown as a positive amount) prior to and after actuarial present value adjustments. Actuarial present value adjustments increase the liability value as the adjustments increase the expected future policy obligations (costs) associated with the unearned premium. The variances noted are mainly driven by the unearned premium variance.

Alberta Non-Grid RSP Actual vs Projected Summary: Premium Deficiency / (DPAC) Amounts ($ thousands)

Table 03

	Premium Deficiency / (Deferred Policy Acquisition Costs)		actuarial present value adjustments		Premium Deficiency / (DPAC) including actuarial present value adjustments	
	Actual	Actual less Projected	Actual	Actual less Projected	Actual	Actual less Projected
balance:	(1,361)	8	5,284	(38)	3,923	(30)
balance as % unearned premium:	(2.1%)	-	8.2%	-	6.1%	-
actual unearned premium:	64,756					
less projected:	(445)					

3 Ultimate Loss Ratio Matching Method

An "ultimate loss ratio matching method" continues to be applied to the current month and two projected months shown in the Operational Reports, with IBNR determined by accident year as follows:

(a) Earned premium to-date
(b) Ultimate loss[11] ratio per latest valuation
(c) Estimated ultimate incurred = (a) x (b)
(d) Recorded indemnity & allowed claims expense to-date
(e) IBNR = (c) – (d)

4 Calendar Year-to-Date Results

The following table summarizes the calendar year-to-date results for indemnity & allowed claims expenses[12], including IBNR.

In calculating the amounts as percentages of earned premium, the calendar year-to-date earned premium has been used, which includes earned premium associated with the current accident year but also earned premium adjustments related to prior accident years. Specifically, the current accident year (CAY) ratio in the table is 98.2% rather than 96.1% (the valuation ultimate ratio for accident year 2020), as the calendar year-to-date earned premium includes prior accident year earned premium adjustments. (Note that the ratios in this table may differ slightly from those shown in the Alberta Non-Grid RSP Summary of Operations due to rounding.)

Alberta Non-Grid RSP Calendar Year-to-Date Indemnity & Allowed Claims Expense Summary
($ thousands)

Table 04	YTD Nominal Values		YTD actuarial present value adjustment		YTD Total		Change from Prior Month YTD	
	Amount	% EP	Amount	% EP	Amount	% EP	Amount	LR pts
PAYs	(3,434)	(4.7%)	1,285	1.8%	(2,149)	(2.9%)	(462)	(0.2%)
CAY	71,531	98.2%	4,065	5.6%	75,596	103.7%	9,831	(1.6%)
TOTAL	68,097	93.4%	5,350	7.3%	73,447	100.8%	9,369	(1.8%)

("% EP" based on 2020 calendar year-to-date earned premium; ratios may not total due to rounding)

In general, prior accident years (PAYs) changes from last month are due to the release of the actuarial present value adjustments with claims payments, except when valuations are implemented. The loss ratio change year-to-date in Table 04 reflects not only changes in the prior accident year levels, but also the increase in the calendar year-to-date earned premium with an additional month's earned premium.

For the current accident year (CAY), changes in the year-to-date total reflects the additional month's exposure and regular changes to actuarial present value adjustments as the year ages.

[11]"Loss" here refers to indemnity and allowed claims expenses, but does not include the claims expense allowance included in member company overall expense allowances ("Expense Allowance" in the Operational Report).

[12]Allowed claims expenses are first party legal and other expenses as listed in the RSP Claims Guide. Claims expenses paid through the member company expense allowance are NOT included in this analysis.

5 Current Operational Report – Additional Exhibits

Section 6 provides exhibits pertaining to the actuarial provisions reflected in the current month's Operational Report.

IBNR (including actuarial present value adjustments) presented in section 6, Exhibit A, were derived on a discounted basis, and therefore reflect the time value of money and include an explicit provision for adverse deviations in accordance with accepted actuarial practice in Canada.

IBNR presented in section 6, Exhibit B, does NOT include any actuarial present value adjustments. The "Total IBNR" from this exhibit is shown in the Operational Report as "Undiscounted IBNR".

The ultimate loss ratios detailed in section 6, Exhibit B, refer to the estimates derived on the basis of various actuarial methodologies applied to the experience of the Alberta Non-Grid Risk Sharing Pool for the purposes of the most recent quarterly valuation. As discussed in section 3, IBNR reflected in the current month's Operational Report was derived as the difference between the estimated ultimate for the claims amount (i.e. earned premium x ultimate loss ratio) and the associated current recorded amounts (life-to-date payments plus current case reserves).

6 EXHIBITS

The exhibits listed below are provided on the pages that follow:

EXHIBIT A	IBNR for Member Sharing – includes Actuarial Present Value Adjustments
EXHIBIT B	IBNR
EXHIBIT C	Premium Liabilities
EXHIBIT D	Projected Year-end Policy Liabilities
EXHIBIT E	Discount Rate & Margins for Adverse Deviations
EXHIBIT F	Interest Rate Sensitivity
EXHIBIT G	Components of IBNR Change During Month

EXHIBIT A

IBNR for Member Sharing – includes Actuarial Present Value Adjustments

TABLE EXHIBIT A

Amounts in $000s

IBNR + M/S actuarial present value adjustments	Accident Year	Actual Jun. 2020	Actual Jul. 2020	Projected Aug. 2020	Projected Sep. 2020	Projected Dec. 2020
	2004	42	42	42	41	36
	2005	13	13	13	13	12
	2006	1	1	1	1	1
	2007	17	18	18	17	15
	2008	67	68	67	65	59
	2009	50	58	56	55	49
	2010	72	118	116	114	102
	2011	(328)	(328)	(328)	(320)	(289)
	2012	201	182	178	175	155
	2013	449	418	410	400	359
	2014	1,213	1,207	1,190	1,162	1,043
discount rate	2015	2,378	2,351	2,318	2,264	2,032
0.63%	2016	3,720	3,733	3,567	3,393	3,021
	2017	8,343	7,820	7,591	7,184	6,570
interest rate margin	2018	12,837	12,295	11,832	11,434	10,485
25 basis pts	2019	31,533	31,161	30,801	30,257	28,571
	2020	23,142	19,499	20,827	22,253	43,683
	TOTAL	83,750	78,656	78,699	78,508	95,904
	Change		(5,094)	43	(191)	

Please see Exhibit G, page 1 for Components of Change during Current Month

EXHIBIT B

IBNR

TABLE EXHIBIT B — Amounts in $000s

IBNR

Ultimate Loss Ratio	Accident Year	Actual Jun. 2020	Actual Jul. 2020	Projected Aug. 2020	Projected Sep. 2020	Projected Dec. 2020
349.1%	2004	36	36	36	35	31
97.4%	2005	5	5	5	5	5
86.9%	2006	1	1	1	1	1
101.8%	2007	(11)	(10)	(10)	(10)	(9)
101.1%	2008	64	65	64	62	56
95.6%	2009	(28)	(21)	(21)	(20)	(18)
84.3%	2010	(27)	19	19	19	17
83.9%	2011	(550)	(550)	(544)	(531)	(477)
100.7%	2012	(93)	(111)	(110)	(107)	(96)
98.3%	2013	187	156	154	150	135
107.8%	2014	862	856	847	827	744
95.2%	2015	1,724	1,705	1,688	1,647	1,481
116.1%	2016	2,103	2,137	1,996	1,858	1,613
108.3%	2017	5,211	4,737	4,543	4,193	3,789
100.1%	2018	8,645	8,215	7,804	7,492	6,809
97.4%	2019	25,598	25,325	25,046	24,595	23,170
96.1%	2020	18,741	15,434	16,251	17,225	35,768
	TOTAL	62,468	57,999	57,769	57,441	73,019
	Change		(4,469)	(230)	(328)	

Please see Exhibit G, page 2 for Components of Change during Current Month

EXHIBIT C

Premium Liabilities

TABLE EXHIBIT C — Amounts in $000s

Premium Liabilities	Actual Jun. 2020	Actual Jul. 2020	Projected Aug. 2020	Projected Sep. 2020	Projected Dec. 2020
(1) unearned premium (UP)	66,622	64,756	66,240	72,693	81,580
FOR MEMBER SHARING					
(2) expected future costs ratio {% of (1)}	105.7%	106.1%	106.5%	107.1%	108.9%
(3) expected future costs {(1) x (2)}	70,422	68,679	70,567	77,835	88,807
(4) premium deficiency / (deferred policy acquisition cost)	3,800	3,923	4,327	5,142	7,227
Excluding Actuarial Present Value Adjustments					
(5) expected future costs ratio {% of (1)}	97.6%	97.9%	98.3%	98.8%	100.5%
(6) expected future costs {(1) x (5)}	65,002	63,395	65,134	71,845	81,972
(7) premium deficiency / (deferred policy acquisition cost)	(1,620)	(1,361)	(1,106)	(848)	392

EXHIBIT D

Projected Year-end Policy Liabilities

The table below presents the projected policy liabilities as at December 31, 2020, broken down by component.

Alberta non-Grid	Projected Balances as at Dec. 31, 2020 ($000s)									
ending 2020	nominal values			actuarial present value adjustments (apvs)						
Acc Yr	Case	IBNR	Total Unpaid	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL
2004	23	31	54	-	-	5	-	5	5	59
2005	63	5	68	-	-	7	-	7	7	75
2006	1	1	2	-	-	-	-	-	-	2
2007	259	(9)	250	(2)	1	25	-	25	24	274
2008	(31)	56	25	-	-	3	-	3	3	28
2009	749	(18)	731	(8)	3	73	(1)	72	67	798
2010	907	17	924	(11)	5	92	(1)	91	85	1,009
2011	2,560	(477)	2,083	(29)	12	208	(3)	205	188	2,271
2012	2,861	(96)	2,765	(39)	17	277	(4)	273	251	3,016
2013	2,333	135	2,468	(35)	15	247	(3)	244	224	2,692
2014	2,690	744	3,434	(62)	24	343	(6)	337	299	3,733
2015	4,993	1,481	6,474	(129)	52	641	(13)	628	551	7,025
2016	14,326	1,613	15,939	(271)	112	1,594	(27)	1,567	1,408	17,347
2017	20,816	3,789	24,605	(394)	148	3,076	(49)	3,027	2,781	27,386
2018	25,729	6,809	32,538	(521)	195	4,067	(65)	4,002	3,676	36,214
2019	25,093	23,170	48,263	(820)	338	5,985	(102)	5,883	5,401	53,664
PAYs (sub-total):	103,372	37,251	140,623	(2,321)	922	16,643	(274)	16,369	14,970	155,593
CAY (2020)	39,601	35,768	75,369	(1,281)	528	8,818	(150)	8,668	7,915	83,284
claims liabilities:	142,973	73,019	215,992	(3,602)	1,450	25,461	(424)	25,037	22,885	238,877
	Unearned Premium	Premium Deficiency / (DPAC)	Total Provision	discount	investment PfAD	nominal development PfAD	development PfAD discount	development PfAD	Total apvs	TOTAL*
premium liabilities:	81,580	392	81,972	(1,061)	408	7,587	(99)	7,488	6,835	88,807
									*Total may not be sum of parts, as apvs apply to future costs within UPR	
policy liabilities:			**297,964**	**(4,663)**	**1,858**	**33,048**	**(523)**	**32,525**	**29,720**	**327,684**

EXHIBIT E

Discount Rate & Margins for Adverse Deviations

The tables below present selected margins for adverse development by coverage (the total is a weighted average, based on the unpaid claims projection for December 31, 2020 from the valuation), followed by the selected discount rate and the associated margin for investment income.

Selected Claims Development MfADs (Mar. 31, 2020)

Accident Year	Third Party Liability Margins	Accident Benefits Margins	Other Coverages Margins	Total Margins
2004	10.0%	10.0%	10.0%	10.0%
2005	10.0%	10.0%	10.0%	10.0%
2006	9.9%	10.0%	10.0%	9.9%
2007	10.0%	10.0%	10.0%	10.0%
2008	10.0%	10.0%	10.0%	10.0%
2009	10.0%	10.0%	10.0%	10.0%
2010	10.0%	10.0%	10.0%	10.0%
2011	10.0%	10.0%	10.0%	10.0%
2012	10.0%	10.0%	9.3%	10.0%
2013	10.0%	10.0%	10.0%	10.0%
2014	10.0%	10.0%	9.2%	10.0%
2015	10.0%	10.0%	10.0%	9.9%
2016	10.0%	10.0%	10.0%	10.0%
2017	12.5%	10.0%	12.5%	12.5%
2018	12.5%	10.0%	11.5%	12.5%
2019	12.4%	10.0%	7.7%	12.4%
2020	12.2%	10.0%	12.5%	11.7%
2021	11.9%	10.0%	5.2%	9.3%
prem liab	11.9%	10.0%	5.2%	9.3%

discount rate:	0.63%
margin (basis points):	25

EXHIBIT F

Interest Rate Sensitivity

The tables below present sensitivity to the member statement claims liability as projected to Dec. 31, 2020 from the latest valuation date (projections in exhibits A to D are to Dec. 31, 2020, and are based on more up-to-date information). We have included the most recent valuation selection (0.63%), the prior valuation assumption (1.64%) and the prior fiscal year end valuation assumption (1.46%) for comparative purposes. A 25 basis point margin for investment return adverse deviation is used in all scenarios presented.

$ Format: $000s

	Actuarial Present Value of Provisions at Various Discount Rates - Dec. 31, 2020 projected Unpaid							
AY	0.00%	0.13%	0.63%	1.13%	1.63%	2.13%	1.64%	1.46%
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	1	1	1	1	1	1	1	1
2007	247	247	246	244	243	241	243	243
2008	-	-	-	-	-	-	-	-
2009	694	694	689	683	677	671	677	679
2010	915	915	908	900	892	884	892	894
2011	2,019	2,018	2,001	1,979	1,958	1,937	1,957	1,965
2012	2,726	2,725	2,701	2,672	2,643	2,615	2,643	2,653
2013	2,763	2,762	2,738	2,708	2,679	2,651	2,679	2,689
2014	4,502	4,500	4,451	4,389	4,329	4,270	4,327	4,349
2015	6,202	6,200	6,121	6,023	5,927	5,834	5,924	5,959
2016	15,301	15,297	15,134	14,933	14,737	14,547	14,733	14,803
2017	23,692	23,684	23,443	23,148	22,860	22,579	22,852	22,957
2018	34,773	34,761	34,409	33,977	33,555	33,143	33,542	33,696
2019	52,418	52,395	51,837	51,148	50,474	49,822	50,460	50,704
2020	85,401	85,366	84,460	83,339	82,245	81,187	82,222	82,618
Total	231,654	231,565	229,139	226,144	223,220	220,382	223,152	224,210
	curr - 100 bp	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	prior val assumption	prior fyr end assumption

	Dollar Impact Relative to Valuation Assumption							
AY	0.00%	0.13%	0.63%	1.13%	1.63%	2.13%	1.64%	1.46%
Total	2,515	2,426	-	(2,995)	(5,919)	(8,757)	(5,987)	(4,929)
	curr - 100 bp	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	prior val assumption	prior fyr end assumption

	Percentage Impact Relative to Valuation Assumption							
AY	0.00%	0.13%	0.63%	1.13%	1.63%	2.13%	1.64%	1.46%
2004	-	-	-	-	-	-	-	-
2005	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
2007	0.4%	0.4%	-	(0.8%)	(1.2%)	(2.0%)	(1.2%)	(1.2%)
2008	-	-	-	-	-	-	-	-
2009	0.7%	0.7%	-	(0.9%)	(1.7%)	(2.6%)	(1.7%)	(1.5%)
2010	0.8%	0.8%	-	(0.9%)	(1.8%)	(2.6%)	(1.8%)	(1.5%)
2011	0.9%	0.8%	-	(1.1%)	(2.1%)	(3.2%)	(2.2%)	(1.8%)
2012	0.9%	0.9%	-	(1.1%)	(2.1%)	(3.2%)	(2.1%)	(1.8%)
2013	0.9%	0.9%	-	(1.1%)	(2.2%)	(3.2%)	(2.2%)	(1.8%)
2014	1.1%	1.1%	-	(1.4%)	(2.7%)	(4.1%)	(2.8%)	(2.3%)
2015	1.3%	1.3%	-	(1.6%)	(3.2%)	(4.7%)	(3.2%)	(2.6%)
2016	1.1%	1.1%	-	(1.3%)	(2.6%)	(3.9%)	(2.6%)	(2.2%)
2017	1.1%	1.0%	-	(1.3%)	(2.5%)	(3.7%)	(2.5%)	(2.1%)
2018	1.1%	1.0%	-	(1.3%)	(2.5%)	(3.7%)	(2.5%)	(2.1%)
2019	1.1%	1.1%	-	(1.3%)	(2.6%)	(3.9%)	(2.7%)	(2.2%)
2020	1.1%	1.1%	-	(1.3%)	(2.6%)	(3.9%)	(2.6%)	(2.2%)
Total	1.1%	1.1%	-	(1.3%)	(2.6%)	(3.8%)	(2.6%)	(2.2%)
	curr - 100 bp	curr - 50 bp	curr val assumption	curr + 50bp	curr + 100bp	curr + 150bp	prior val assumption	prior fyr end assumption

EXHIBIT G

Components of Member Statement IBNR (i.e. "Discounted") Change During Month

RSP	**Alberta Non-Grid**
AccountCode Desc	**IBNR - Discounted**

M/S IBNR - in $000s

	Values						
AccYear	**Sum of Prior Month Actual Amount**	**Sum of Projected Change**	**Sum of Change Due to AvsP Variances**	**Sum of Change Due to Valuation Implementation**	**Sum of Total Change**	**Sum of % Total Change**	**Sum of Current Month Final Amount**
2004	42	(1)	1	-	-	-	42
2005	13	-	-	-	-	-	13
2006	1	-	-	-	-	-	1
2007	17	(1)	2	-	1	5.9%	18
2008	67	(1)	2	-	1	1.5%	68
2009	50	(2)	10	-	8	16.0%	58
2010	72	(2)	48	-	46	63.9%	118
2011	(328)	4	(4)	-	-	-	(328)
2012	201	(6)	(13)	-	(19)	(9.5%)	182
2013	449	(11)	(20)	-	(31)	(6.9%)	418
2014	1,213	(27)	21	-	(6)	(0.5%)	1,207
2015	2,378	(54)	27	-	(27)	(1.1%)	2,351
2016	3,720	(197)	210	-	13	0.3%	3,733
2017	8,343	(432)	(91)	-	(523)	(6.3%)	7,820
2018	12,837	(291)	(251)	-	(542)	(4.2%)	12,295
2019	31,533	(363)	(9)	-	(372)	(1.2%)	31,161
2020	23,142	3,222	(6,865)	-	(3,643)	(15.7%)	19,499
Grand Total	**83,750**	**1,838**	**(6,932)**	**-**	**(5,094)**	**(6.1%)**	**78,656**

EXHIBIT G

Components of IBNR (i.e. "Undiscounted") Change During Month

RSP	**Alberta Non-Grid**
AccountCode Desc	**IBNR - Undiscounted**

IBNR - in $000s

AccYear	Values Sum of Prior Month Actual Amount	Sum of Projected Change	Sum of Change Due to AvsP Variances	Sum of Change Due to Valuation Implementation	Sum of Total Change	Sum of % Total Change	Sum of Current Month Final Amount
2004	36	(1)	1	-	-	-	36
2005	5	-	-	-	-	-	5
2006	1	-	-	-	-	-	1
2007	(11)	-	1	-	1	(9.1%)	(10)
2008	64	(1)	2	-	1	1.6%	65
2009	(28)	1	6	-	7	(25.0%)	(21)
2010	(27)	1	45	-	46	(170.4%)	19
2011	(550)	11	(11)	-	-	-	(550)
2012	(93)	2	(20)	-	(18)	19.4%	(111)
2013	187	(4)	(27)	-	(31)	(16.6%)	156
2014	862	(17)	11	-	(6)	(0.7%)	856
2015	1,724	(34)	15	-	(19)	(1.1%)	1,705
2016	2,103	(158)	192	-	34	1.6%	2,137
2017	5,211	(334)	(140)	-	(474)	(9.1%)	4,737
2018	8,645	(190)	(240)	-	(430)	(5.0%)	8,215
2019	25,598	(256)	(17)	-	(273)	(1.1%)	25,325
2020	18,741	3,284	(6,591)	-	(3,307)	(17.6%)	15,434
Grand Total	**62,468**	**2,304**	**(6,773)**	**-**	**(4,469)**	**(7.2%)**	**57,999**